### Watts Bar 1

# **Initiating Events**

Significance: Mar 16, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

#### FAILED TO FOLLOW INSTRUCTIONS FOR IMPLEMENTING DCN 50844-A

The licensee identified a non-cited violation of 10 CFR Appendix B, Criterion V, on December 19, 2001, for failure to follow instructions for implementing DCN 50844-A. This resulted in a reactor trip due to an AMSAC actuation.

Inspection Report#: 2001005(pdf)

Significance: Mar 16, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

### **EXCEEDED OVERTIME GUIDELINES FOR UNIT STAFF WITHOUT ADVANCE AUTHORIZATION**

The licensee identified a non-cited violation of Technical Specification 5.2.2 Unit Staff, on March 5 and 14, 2002, for exceeded

overtime guidelines without advance authorization for personnel performing safety-related functions.

Inspection Report# : 2001005(pdf)

Significance: Jun 15, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

#### FAILURE TO ADEQUATELY PERFORM A POST MAINTENANCE TEST

The inspectors identified a non-cited violation of Technical Specification 5.7.1, Procedures, for failure to perform a post-maintenance test (visual leak checks of flanged connections) at the required system conditions for a reactor coolant pump seal replacement. This finding was of very low safety significance because all mitigation systems were available and another inspection, unrelated to the required post-maintenance test, visually checked the flanged connections at the required system conditions prior to starting up the reactor.

Inspection Report#: 2002002(pdf)

# **Mitigating Systems**

Significance: Sep 15, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

### Essential Raw Cooling Water Pump A-A Performance Test Inadequately Implemented

The licensee identified a non-cited violation of Technical Specification 5.7.1 (Procedures). On July 13, 2001, an essential raw cooling water (ERCW) pump performance test was inadequately implemented, rendering an ERCW header inoperable.

Inspection Report# : 2001003(pdf)

Significance: Jun 16, 2001

Identified By: NRC
Item Type: FIN Finding

### **INADEQUATE OPERABILITY EVALUATIONS**

The inspectors identified a finding for the untimely performance in May 2001, of two degraded-condition operability evaluations and the lack of technical justification in two other operability evaluations, also performed in May 2001. The finding was of very low safety significance because, while it had the potential to result in continued operation with unrecognized inoperable or unavailable risk significant equipment, it did not result in an actual loss of safety function of a system. There were no compliance issues associated with this finding since the final evaluations demonstrated that the components were operable.

Inspection Report# : 2001002(pdf)

Significance:

Jun 16, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

#### **INADEQUATE MAINTENANCE INSTRUCTION**

The inspectors identified a non-cited violation of Technical Specification 5.7.1.1.a, (recommended procedures in Regulatory Guide 1.33 Revision 2, Appendix A, February 1978) for an inadequate maintenance instruction which resulted in a failure of the 1A-A emergency diesel generator (EDG) breaker on May 16, 2001. The finding was of very low safety significance because, while it caused unplanned unavailability of the 1A-A EDG, only one train of mitigating equipment was affected and the Technical Specifications allowed outage time was not exceeded.

Inspection Report#: 2001002(pdf)

Significance:

Apr 27, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

#### FAILURE TO PROMPTLY CORRECT SURVEILLANCE INSTRUCTIONS

A non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, was identified for a failure to promptly correct surveillance instructions to ensure that relays were reset to permit operation of exhaust fans required for long term operation of the emergency diesel generators. The finding was of very low safety significance because there had been no loss of the function of relays following identification that the instructions were inadequate and required correction.

Inspection Report# : 2001006(pdf)

Significance:

cance: Jun 15, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

#### **FAILURE TO CONTROL TRANSIENT COMBUSTIBLES**

The inspectors identified a non-cited violation of Technical Specification 5.7.1, Procedures, for failure to follow procedures for storing drums of lubricating oil against a Thermo-lag protected conduit containing control cables necessary for establishing shutdown cooling using the residual heat removal system. A transient combustible evaluation specified that the oil was not to be place under Thermo-lag protected cables. This finding was of very low safety significance because fire detection and suppression systems in the room were not degraded, fire brigade performance has been effective, and manual actions could be performed in a physically independent area to restore the shutdown cooling function.

Inspection Report#: 2002002(pdf)

Significance:

Jun 15, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

# FAILURE TO PROMPTLY IMPLEMENT PERIODIC FLOW MONITORING PROGRAM FOR SAFETY-RELATED PUMP ROOM COOLERS

The licensee identified a non-cited violation of 10CFR 50, Appendix B, Criterion XVI, Corrective Action, for failure to implement a periodic flow monitoring program for safety-related pump room coolers. License determined in June 2000, that a flow monitoring program was need because of degraded cooling water flow to safety-related equipment room coolers. In October 2001, inadequate cooling water flow to the 1B RHR pump room cooler was identified during an outage. Licensee's corrective actions were not prompt in that as of December 2001, a periodic flow monitoring program had not been implemented.

Inspection Report#: 2002002(pdf)

Significance: G

Jun 15, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO IMPLEMENT SURVEILANCE INSTRUCTION WHEN SUCTION VALVES TO A RUNNING RHR WERE ISOLATED

The licensee identified a non-cited violation of Technical Specification 5.7.1, Procedures, for failure to adequately implement a Surveillance Instruction when all suction sources to a running RHR pump were isolated on two occasions, during the performance of RHR Hot and Cold Leg Injection Check Valve Testing.

Inspection Report# : 2002002(pdf)

Significance: G Jun 15, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

#### FAILURE TO PLACE ENGINEERED SAFETY FEATURE ACTUATION SYSTEM (ESFAS) CHANNEL IN TRIP POSITION

The licensee identified a non-cited violation of Technical Specification 3.3.2, Condition D, ESFAS Instrumentation, for failure to place an inoperable channel, (Loop 4 main steam header pressure) in the "Trip" position within six hours or be in Mode 3 (hot standby) within 12 hours. Loop 4 main steam header pressure channel was determined to be inoperable for 14 hours and 40 minutes without being placed in the "Trip" position.

Inspection Report# : 2002002 (pdf)

Significance: Jun 1

Jun 15, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

#### FAILURE TO POST A ROVING FIRE WATCH AT INTAKE PUMP STRUCTURE

The licensee identified a non-cited violation of Technical Specification 5.7.1, Procedures, for failure to implement Fire Protection Plan to post a roving fire watch when a fire barrier is inoperable. On May 2002, fire doors at the intake pumping station that seperate emergency raw cooling water strainer rooms were found open and a roving fire watch had not been posted.

Inspection Report# : 2002002(pdf)

Significance: G

Dec 16, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

### BOTH TRAINS OF CONTROL ROOM EMERGENCY VENTILATION SYSTEM (CREVS) INOPERABLE

A non-cited violation of Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.10, which requires that in Mode 1, two trains of CREVS shall be operable was identified. Between May 25 and 26, 2000, both trains of CREVS were inoperable, and the actions required by TS 3.7.10.F and TS 3.0.3 were not taken. When the licensee became aware of this conditions on May 26, they immediately entered TS 3.0.3, corrected the condition and exited the LCO. This licensee identified finding was determined to be of very low safety significance.

Inspection Report# : 2000005 (pdf)

Significance:

Sep 16, 2000

Identified By: NRC
Item Type: FIN Finding

#### LICENSEE EVENT REVIEW OF IB EDG BEING OUT-OF-SERVICE

A licensee review of an event involving exhaust fans for an emergency diesel generator (EDG) found out-of-service during an EDG surveillance test, resulted in not considering the failure-to-start of the exhaust fans as an EDG functional failure or as EDG unavailability time. The risk was determined to be of very low safety significance because the EDG unavailability time was relatively short, not exceeding the Technical Specification allowed outage time.

Inspection Report#: 2000004(pdf)

Significance:

Sep 16, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

#### FAILURE TO MAINTAIN ADEQUATE FIRE DETECTION SURVEILLANCE INSTRUCTION

A non-cited violation of Technical Specification (TS) 5.7.1 was identified for an inadequate surveillance procedure which rendered the 1B EDG inoperable for 25 hours. The surveillance procedure failed to ensure that a fire detection system relay was reset which defeated the automatic start feature of the diesel generator room ventilation fans. The risk was determined to be of very low safety significance because only the mitigating system cornerstone was affected and a single emergency AC train was unavailable for less than the TS-allowed outage time.

Inspection Report# : 2000004 (pdf)

Significance: Jun 17, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO ESTABLISH ADEQUATE CHEMISTRY CONTROLS TO PREVENT ASIATIC CLAM INFESTATION

A violation of Technical Specification 5.7.1.1 was identified for an inadequate chemistry procedure utilized for the prevention of Asiatic clam infestations. Partial blockage of piping for containment spray and residual heat removal pump room coolers was discovered during licensee troubleshooting of a low flow condition. The finding had very low risk significance because licensee analysis showed that the coolers remained functional.

Inspection Report# : 2000003 (pdf)

# **Barrier Integrity**

# **Emergency Preparedness**

# **Occupational Radiation Safety**

Significance: G

Mar 16, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

#### PERSONNEL ENTRY INTO A HIGH RADIATION AREA

The licensee identified a non-cited violation of Technical Specifications 5.11.1b and 5.11.1d, for failure to meet requirements for entry into a high radiation area in that an individual entered without signing in on a radiation work permit and with an inoperable radiation monitoring device.

Inspection Report# : 2001005(pdf)

Significance:

Mar 01, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

#### FAILURE TO MAINTAIN COMPLETE AND ACCURATE PERSONNEL DOSE RECORDS

The licensee identified a non-cited violation of 10 CFR 20.401, 10 CFR 20.22106 and 10 CFR 50.9 for failure to maintain accurate records of doses received by all individuals for whom monitoring was required. This finding was not processed under the Reactor Oversight Process and was characterized as a severity level IV violation consistant with Supplement VII of the Enforcement Policy because it involved the accuracy of required records.

Inspection Report# : 2002005(pdf)

# **Public Radiation Safety**

# **Physical Protection**

### **Miscellaneous**

Significance: SL-II Jun 16, 2001

Identified By: NRC Item Type: VIO Violation

#### **EMPLOYEE PROTECTED ACTIVITY**

On February 7, 2000, a Severity Level II violation with a proposed civil penalty was issued to the licensee. The violation related to corporate activities and involved employment discrimination contrary to the requirements of 10 CFR 50.7, "Employee Protection," in that the licensee did not select a former employee to a competitive position in the corporate chemistry organization in 1996, due, at

least in part, to his engagement in protected activities. On January 22, 2001, the licensee denied the violation and on May 4, an Order was issued sustaining the violation and imposing the civil penalty. On June 1, TVA requested an enforcement hearing on the Order.

Inspection Report# : 2001002(pdf)

Significance: N/A Apr 27, 2001

Identified By: NRC Item Type: FIN Finding

#### **IDENTIFICATION AND RESOLUTION OF PROBLEMS**

The licensee was effective at identifying plant deficiencies and placing them in their corrective action program. The licensee's effectiveness at problem identification was evidenced by few deficiencies identified by external organizations, including the NRC, that had not been previously self identified. The licensee's operation of the facility and its material condition were indicative of effective self identification and correction of plant problems. Corrective actions were effective and were generally timely. Licensee's response to a previously identified non-cited violation was not timely but this performance issue was of very low safety significance. Audits and self-assessments were effective, for the most part, thorough and self critical providing useful feedback to improve plant performance. Operating experience was effectively implemented. The inspection did not identify significant differences between the licensee's assessment of their overall condition of the corrective action program and the NRC's program assessment. A safety conscious work environment was evident.

Inspection Report# : 2001006(pdf)

Significance:

Sep 16, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

### FAILURE TO EVALUATE POTENTIAL DEFECTIVE ICE BASKET SCREWS IN 1995

A non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, was identified for not evaluating potentially defective new ice basket screws in 1995. The risk was determined to be of very low safety significance based on a technical significance review of the issue, as described in an NRC letter to the licensee, dated July 17, 2000.

Inspection Report# : 2000004 (pdf)

Significance: N/A Sep 16, 2000

Identified By: NRC Item Type: VIO Violation

#### FAILURE TO ADEQUATELY MONITOR CORRECTIVE ACTION IMPLEMENTATION FOR PER WBPER950246

A Severity Level IV violation of 10 CFR 50, Appendix B, Criterion V was identified for not adequately monitoring corrective action implementation for a 1995 problem evaluation report, involving the ice condenser system. Based on a technical significance review of the issue, as described in an NRC letter to the licensee, dated July 17, 2000, and because of the willful aspects of the issue, the violation was determined to be outside the NRC SDP process.

Inspection Report#: 2000004(pdf)

Significance: N/A Jul 28, 2000

Identified By: NRC Item Type: FIN Finding

#### **IDENTIFICATION AND RESOLUTION OF PROBLEMS**

The licensee was effective at identifying problems and placing them into the corrective action program. The licensee's effectiveness at problem identification was evident by the relatively few deficiencies identified by external organizations, including the NRC, that had not been previously identified by the licensee. The licensee appropriately evaluated individual problems based on risk significance when establishing schedules for implementing corrective actions. Corrective actions were generally implemented in a timely manner. Licensee audits and assessments were found to be effective with an improving trend noted in the quality of problem reporting. The interviews of plant personnel indicated that they felt free to input safety issues and conditions adverse to quality into the corrective action program. The findings of licensee audits and assessments were consistent with the team's observations. A safety conscious work environment was evident.

Inspection Report#: 2000007 (pdf)

Last modified: July 22, 2002